Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1. (Currently Amended) A method, comprising:

scanning an address space to locate a structure, wherein scanning the address space to locate the structure comprises scanning for an identification register of a device whose value matches a predetermined value, wherein the identification register identifies a starting address location of the structure within the address space~~;~~, wherein scanning the address space comprises:

reading a first capabilities pointer located inside the device, wherein the first capabilities pointer points to a first identification register having a first identification value; and

reading a second capabilities pointer if the first identification value of the first identification register does not matches the predetermined value;

determining the starting address location of the structure from the identification register whose value matches the predetermined value; and

accessing a register located within the structure by adding a predetermined offset to the starting address location of the structure.

2. (Previously Presented) The method of claim 1, wherein scanning the address space includes scanning a PCI address space.

3. (Previously Presented) The method of claim 1, wherein scanning the address space includes scanning a PCI Express address space.

4. (Previously Presented) The method of claim 1, wherein scanning the address space to locate the structure includes scanning an address space to locate a structure that is located within a configuration space of the device.

5. (Currently Amended) The method of claim 2, wherein ~~scanning the address space to locate the structure includes~~ reading the first capabilities pointer comprises reading an 8-bit PCI capabilities pointer located inside ~~a~~ the ~~target~~ device.

6. (Previously Presented) The method of claim 5, wherein scanning the address space to locate the structure further includes determining whether the 8-bit PCI capabilities pointer is a valid capabilities pointer.

7. (Currently Amended) The method of claim 6, wherein scanning the address space to locate the structure further includes following the 8-bit PCI capabilities pointer to read the first identification value, wherein the first identification value is an 8-bit capabilities identification value.

8. (Currently Amended) The method of claim 7, wherein scanning the address space to locate the structure further includes determining whether the read 8-bit capabilities identification value matches the predetermined value, wherein the predetermined value is a predetermined capabilities identification value.

9. (Currently Amended) The method of claim 8, wherein ~~scanning the address space to locate the structure further includes~~ reading the second capabilities pointer comprises reading a next 8-bit capabilities pointer if the read 8-bit capabilities identification value does not match the predetermined capabilities identification value.

10. (Previously Presented) The method of claim 9, wherein determining the starting address location of the structure includes returning a pointer to the structure if the read 8-bit capabilities identification value matches the predetermined capabilities identification value.

11. (Currently Amended) The method of claim 3, wherein ~~scanning the address space to locate the structure includes~~ reading the first capabilities pointer comprises reading a 12-bit PCI Express capabilities pointer located inside ~~a~~ the ~~target~~ device.

12. (Previously Presented) The method of claim 11, wherein scanning the address space to locate the structure further includes determining whether the 12-bit PCI Express capabilities pointer is a valid capabilities pointer.

13. (Currently Amended) The method of claim 12, wherein scanning the address space to locate the structure further includes following the 12-bit PCI Express capabilities pointer to read a 16-bit capabilities identification value as the first identification value.

14. (Currently Amended) The method of claim 13, wherein scanning the address space to locate the structure further includes determining whether the read 16-bit capabilities identification value matches the predetermined value, wherein the predetermined value is a predetermined capabilities identification value.

15. (Currently Amended) The method of claim 14, wherein ~~scanning the address space to locate the structure further includes~~ reading the second capabilities pointer comprises reading a next 12-bit capabilities pointer if the read 16-bit capabilities identification value does not match the predetermined capabilities identification value.

16. (Previously Presented) The method of claim 15, wherein determining the starting address location of the structure includes returning a pointer to the structure if the read 16-bit capabilities identification value matches the predetermined capabilities identification value.

17. (Currently Amended) A machine-readable medium having stored thereon instructions which, when executed by a computer system, causes the computer system to perform a method comprising:

scanning an address space to locate a structure, wherein scanning the address space to locate the structure comprises scanning for an identification register of a device whose value matches a predetermined value, wherein the identification register identifies a starting address location of the structure within the address space;, wherein scanning the address space comprises:

reading a first capabilities pointer located inside the device, wherein the first capabilities pointer points to a first identification register having a first identification value; and

reading a second capabilities pointer if the first identification value of the first identification register does not matches the predetermined value;

determining the starting address location of the structure from the identification register whose value matches the predetermined value; and

accessing a register located within the structure by adding a predetermined offset to the starting address location of the structure.

18. (Previously Presented) The machine-readable medium of claim 17, wherein scanning the address space includes scanning a PCI address space.

19. (Previously Presented) The machine-readable medium of claim 17, wherein scanning the address space includes scanning a PCI Express address space.

20. (Previously Presented) The machine-readable medium of claim 17, wherein scanning the address space to locate the structure includes scanning an address space to locate a structure that is located within a configuration space of the device.

21. (Currently Amended) The machine-readable medium of claim 18, wherein ~~scanning the address space to locate the structure includes~~ reading the first capabilities pointer comprises reading an 8-bit PCI capabilities pointer located inside ~~a~~ the ~~target~~ device.

22. (Previously Presented) The machine-readable medium of claim 21, wherein scanning the address space to locate the structure further includes determining whether the 8-bit PCI capabilities pointer is a valid capabilities pointer.

23. (Currently Amended) The machine-readable medium of claim 22, wherein scanning the address space to locate the structure further includes following the 8-bit PCI capabilities pointer to read the first identification value, wherein the first identification value is an 8-bit capabilities identification value.

24. (Currently Amended) The machine-readable medium of claim 23, wherein scanning the address space to locate the structure further includes determining whether the read 8-bit capabilities identification value matches the predetermined value, wherein the predetermined value is a predetermined capabilities identification value.

25. (Currently Amended) The machine-readable medium of claim 24, ~~scanning the address space to locate the structure further includes~~ reading the second capabilities pointer comprises reading a next 8-bit capabilities pointer if the read 8-bit capabilities identification value does not match the predetermined capabilities identification value.

26. (Previously Presented) The machine-readable medium of claim 25, wherein determining the starting address location of the structure includes returning a pointer to the structure if the read 8-bit capabilities identification value matches the predetermined capabilities identification value.

27. (Currently Amended) The machine-readable medium of claim 19, wherein ~~scanning the address space to locate the structure includes~~ reading the first capabilities pointer comprises reading a 12-bit PCI Express capabilities pointer located inside ~~a~~ the ~~target~~ device.

28. (Previously Presented) The machine-readable medium of claim 27, wherein scanning the address space to locate the structure further includes determining whether the 12-bit PCI Express capabilities pointer is a valid capabilities pointer.

29. (Currently Amended) The machine-readable medium of claim 28, wherein scanning the address space to locate the structure further includes following the 12-bit PCI Express capabilities pointer to read a 16-bit capabilities identification value as the first identification value.

30. (Currently Amended) The machine-readable medium of claim 29, wherein scanning the address space to locate the structure further includes determining whether the read

16-bit capabilities identification value matches the predetermined value, wherein the predetermined value is a predetermined capabilities identification value.

31. (Currently Amended) The machine-readable medium of claim 30, wherein ~~scanning the address space to locate the structure further includes~~ reading the second capabilities pointer comprises reading a next 12-bit capabilities pointer if the read 16-bit capabilities identification value does not match the predetermined capabilities identification value.

32. (Previously Presented) The machine-readable medium of claim 31, wherein determining the starting address location of the structure includes returning a pointer to the structure if the read 16-bit capabilities identification value matches the predetermined capabilities identification value.